|   | Application No.   | Applicant(s)  | - Mari                    |
|---|---|---|---------------------------|
| Notice of Allowability  |   |   |                           |
|   | 10/021,025<br>Examiner  | KAWAZOE, NAOYU  | KI                        |
|   |   |   |                           |
|   | Karen B Addison   | 2834  |                           |
| The MAILING DATE of this communication apper All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED in this ap<br>or other appropriate communicatio<br>GHTS. This application is subject: | oplication. If not include<br>n will be mailed in due c | ed<br>course. <b>THIS</b> |
| 1. This communication is responsive to <u>11/24/03</u> .  |   |   |                           |
| 2. The allowed claim(s) is/are <u>5 and 7-11.</u>   |   |   |                           |
| 3. The drawings filed on 19 December 2001 are accepted by the Examiner.   |   |   |                           |
| <ul> <li>4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some* c)  None of the:</li> </ul>   |   |   |                           |
| 1. 🛮 Certified copies of the priority documents have been received.   |   |   |                           |
| 2. Certified copies of the priority documents have been received in Application No  |   |   |                           |
| 3. Copies of the certified copies of the priority documents have been received in this national stage application from the  |   |   |                           |
| International Bureau (PCT Rule 17.2(a)).  |   |   |                           |
| * Certified copies not received:  |   |   |                           |
| 5. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.   |   |   |                           |
| (a) The translation of the foreign language provisional application has been received.  6. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included  |   |   |                           |
| in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  |   |   |                           |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of t   |   |   |                           |
| 7. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.  |   |   |                           |
| 8. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached   |   |   |                           |
| <ol> <li>1) ☐ hereto or 2) ☐ to Paper No</li> <li>(b) ☐ including changes required by the proposed drawing correction filed, which has been approved by the Examiner.</li> </ol>  |   |   |                           |
| (c) ☐ including changes required by the proposed drawing correction filed, which has been approved by the Examiner.  (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No  |   |   |                           |
| (b) Initiating changes required by the attached Examiner's Amendment's Comment of in the Cine details of a specific.  |   |   |                           |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).   |   |   |                           |
| 9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.   |   |   |                           |
| Attachment(s)   |   |   |                           |
| 1⊠ Notice of References Cited (PTO-892)   | 5☐ Notice of Informal Pa  | atent Application (PTO-                                 | 152)                      |
| 2 Notice of Draftperson's Patent Drawing Review (PTO-948)   | 6☐ Interview Summary  | (PTO-413), Paper No                                     | ·                         |
| 3 Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No   | ), 7□ Examiner's Amendm   | nent/Comment  |                           |
| 4 Examiner's Comment Regarding Requirement for Deposit  | 8⊠ Examiner's Stateme   | nt of Reasons for Allowa                                | ance                      |
| of Biological Material  | 9∏ Other .  |   |                           |
|   |   |   |                           |
|   |   |   |                           |
|   |   |   |                           |

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## **DETAILED ACTION**

## Allowable Subject Matter

- 1. Claims 5 and 7-11 are allowed.
- 2. The following is an examiner's statement of reasons for allowance: Prior art shows a piezoelectric actuator injector comprising: a metal case provide on the outside of the side surface of the piezoelectric device, an insulating member place between the piezoelectric device and the case wherein, the silicon insulating member is made of a piece separated from the piezoelectric device and the insulating member is adhered to the inner wall of the case.

However, Prior art fails to show a piezoelectric actuator using a laminated piezoelectric device having alternately layered piezoelectric layers and electrode layers including a metal case provided on the outside surface of the piezoelectric device and an insulating member being made separated from the piezoelectric device, wherein the insulating member is made of a separated piece of paper or a resin wound around the piezoelectric device which has a polygonal or barrel-shaped cross section perpendicular to it's extending and contracting direction.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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## Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen B Addison whose telephone number is 703-306-5855. The examiner can normally be reached on 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1317. The fax phone number for the organization where this application or proceeding is assigned is 703-305-3431.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

KBA 12/12/03